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APPLICATION NO.	FILING	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/615,697	07/09/2003		Mark A. Tigchelaar	D1815-00051	9746	
8933	7590	09/22/2004		EXAM	EXAMINER	
DUANE M IP DEPART	ORRIS, LLI	P	GREEN, CHRISTY MARIE			
ONE LIBER				ART UNIT	PAPER NUMBER	
PHILADELPHIA, PA 19103-7396				3635	3635	
				DATE MAILED: 09/22/2004	1	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Antion Commons	10/615,697	TIGCHELAAR, MARK A.					
Office Action Summary	Examiner	Art Unit					
TI MANUAN DATE (4)	Christy M Green	3635					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 09 Ju	<u>ıly 2003</u> .						
2a) This action is <b>FINAL</b> . 2b) This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)  Claim(s) 1-5 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-5 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or							
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prior application from the International Bureau</li> <li>* See the attached detailed Office action for a list</li> </ul>	s have been received. s have been received in Applicati ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date <u>9/17/04</u> .	6) Other:						

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#### **DETAILED ACTION**

This is a first office action for serial number 10/615617, entitled Undirectional Fiber Reinforced Sheets in a Thermoplastic Matrix, filed July 9, 2003.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fyfe, US Patent # 5,043,033.

Fyfe discloses the claimed invention in a concrete column supporting an overhead load and having a base and resting on a surface, a process of strengthening the column to increase its ability to withstand a typical physical loading accompanying an earthquake, comprising the steps of defining a work area (15) about the surface of the column to which the strengthening is to be applied, the work area defined by circumferential marginal edges arranged in a spaced - apart relation about the column (column 5, lines 21-23 and 48-51), over wrapping the work area (15) with at least one layer of a unidirectional reinforced thermoplastic sheet (27, 44), the sheet wrapped around the column (column 5, lines 51-53), welding the sheet to the column (column 8, lines 43-45), injecting a filler into an annular space between the sheet and the column following the welding (column 5, lines 53-55); and, the sheet (27) has a thickness of from about 0.1 mm to about 3 mm (column 6, lines 58-59).

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# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fyfe in view of Servin, US Patent # 5,464,488.

Fyfe discloses the claimed invention as stated above in claim 1, except for the sheets are lapped joined via ultrastonics. Servin teaches that it is known in the art to provide overlapped fabrics joined together by ultrasonics. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the method step of using ultrasonics as taught by Servin to join lapped sheets of Fyfe in order to provide a method for joining sheets that may be formed in one hour (less time), as compared to the 80 hours typically required to form a woven seam in fabrics (column 3, lines 4-9).

## Allowable Subject Matter

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christy M Green whose telephone number is 703-308-9693. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 703-308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Christy Green** Patent Examiner

September 17, 2004